

IN THE CLAIMS:

1. (Currently Amended) A process for producing colored streams of fluid for a hot water fitting, in which hot and cold water is supplied in pipelines ~~(8; 9)~~ separated from one another and the supply of the quantity ratios of hot and cold water is controlled such that a certain temperature is produced, ~~characterized by the following~~ the process comprising the steps of:

- a. manually opening of the valves for the hot and cold water[[,]] ;
- b. flowing of the hot and cold water into a mixing chamber ~~(7)~~ of the fitting[[,]] ;
- c. actuating of a pressure switch ~~(10)~~ when the pressure rises in said mixing chamber ~~(7)~~ due to the water flowing in[[,]] ;
- d. switching on of a control block ~~(13)~~ by means of said pressure switch ~~(10)~~[[,]] ;
- e. sensing of the temperature of the water mixed in said mixing chamber ~~(7)~~ and reporting the thus determined signals to said control block ~~(13)~~[[,]] ;
- f. recognizing the determined signals as a certain temperature[[,]] ;
- g. classifying the temperature to one or a plurality of defined temperature ranges[[,]] ;
- h. assigning a temperature range to a certain luminous color[[,]] ;
- I. activating diodes ~~(17)~~ of the luminous colors red, blue or yellow in question, which are arranged in the area of an outflow opening ~~(5)~~ of the fitting[[,]] ;
- j. manually ~~adjustment~~ adjusting in the case of the temperature-dependent luminous color deviating from the desired temperature[[,]] ;

- 20 k. manually closing of the valves for the hot and cold water when water is no longer needed[[,]] ;
- l. switching off of said control block (~~13~~) by means of said pressure switch (~~10~~) because of the decreased water pressure in said mixing chamber (~~7~~).

2. (Currently Amended) A process for producing colored streams of fluid for a hot water fitting in accordance with claim 1, ~~characterized in that~~ wherein according to information from a pressure sensor (~~12~~), the fluid is sent to a temperature sensor (~~16~~), at which a different, temperature-dependent, electric signal is produced in each case, which is

5 transmitted into said control block (~~13~~) for comparing the water temperature determined with the ~~staggered~~ set value ranges and for activating said light-emitting diodes (~~17R, 17B, 17G~~) in question of a certain color radiation.

3. (Currently Amended) A process for producing colored streams of fluid for a hot water fitting in accordance with claim 1, ~~characterized in that~~ wherein the primary colors red, yellow and blue are provided for mixing the water in a temperature-dependent, colored appearance, and these primary colors are mixed additively for producing a light in any

5 desired color.

4. (Currently Amended) A process for producing colored streams of fluid for a hot water fitting in accordance with claim 1, ~~characterized in that~~ further comprising, as an

~~alternative, the switching over from the~~ temperature-dependent luminous colors produced of
the stream of fluid ~~can be switched over~~ to a temperature-independent production of a color
5 play by means of a constant changing of the luminous colors.

5. (Currently Amended) A device for ~~the application of the process in accordance~~
~~with the claims 1 through 4~~ producing colored streams of fluid for a hot water fitting, from
which either a cold, hot or mixed cold and hot water water jet can be taken, the device
comprising:

5 a mixing chamber and a flow channel;

a temperature sensor arranged for measuring the temperature of the water located in
the hot water fitting (16) and

a diode means including at least one of differently colored light -emitting diodes and
an RGB-LED (17) are arranged for measuring the temperature of the water located in the
10 hot water fitting, [[and]]

a printed circuit board, said temperature sensor (16) and said ~~light-emitting diodes~~
diode means [[are]] being functionally connected to circuitry supplied with weak current;
can be activated by means of said ~~temperature-dependent, differently colored light-emitting~~
diodes (17) and said means are provided in the flow channel, with which the flow of water is
15 ~~detectable, and the device for producing a colored stream of fluids can be switched on,~~
characterized in that wherein said colored, differently illuminating color diodes (17) and/or
RGB-LED are installed on [[a]] said diode means being functionally connected to said

printed circuit board and being (18) and ~~this said printed circuit board (17) [sic, (18) =~~
Tr.Ed.] is placed with said light-emitting diodes (17) and/or RGB-LED in said perlator (6)
20 ~~or placed directly in the perlator (6)~~ in the fluid flow of said flow channel;

~~_____~~, the hot water fitting is ~~equipped with~~ a pressure switch (10), which is functionally
connected to a pressure sensor (12) arranged in said mixing chamber (7) ₂ in the interior
thereof, for detecting the flow of water; ~~furthermore~~,

a control block (13), to which is supplied weak current by a transformer (14), is
25 provided as circuitry[[,]]

a conduit leading from said control block (13) ~~leads a pipeline (15)~~ to said
temperature sensor (16), which is arranged ~~already~~ at the start of the flow channel in said
mixing chamber (7), said control block (13) ~~is being~~ functionally connected both to said
pressure switch (10) and to said printed circuit board (18) equipped with said light-emitting
30 diodes (17) ~~and/or RGB-LED~~, said printed circuit board (18) with said light-emitting diodes
(17) ~~and/or RGB-LED~~ ~~has~~ having sufficient free space for [[the]] water flow, and thus, the
water is sent to said light-emitting diodes (17) ~~and/or RGB-LED~~, whereby the colored light
rays disperse in said water ~~jet (20)~~, and ~~thus~~, a visible color effect is achieved in reflection
on the edge of said water ~~jet (20)~~ or impacting on an obstacle.

6. (Currently Amended) A device in accordance with claim 5, ~~characterized in that~~
wherein the colors of said light-emitting diode means (17) are arranged and switched in the
necessary number and the selected colors on said printed circuit board (18), such that a

colored jet image, whose action is intended, is produced in the stream of fluid.

7. (Currently Amended) A device in accordance with claim 5, ~~characterized in that~~
wherein for mixing the water in a temperature-dependent, colored appearance, said light
emitting diode means comprises a red-illuminating diode ~~(17R)~~ is provided for the primary
color red, a yellow-illuminating diode ~~(17G)~~ is provided for yellow, and a blue-illuminating
5 diode ~~(17B)~~ is provided for blue, and said control block ~~(13)~~ ~~activates these~~ activating said
light-emitting diodes ~~(17R, 17G [sic, 17Gr? - Tr.Ed.] and 17B)~~, such that these primary
colors are additively mixed for producing a light in any desired color.

8. (New) A device for producing colored streams of fluid for a water fitting, the
device comprising:

a mixing chamber connected to a hot water source and a cold water source;

a flow channel connected to said mixing chamber, said flow channel having a mixed
5 hot and cold water outlet;

a temperature sensor for sensing a temperature of a mixed hot and cold water flow;

at least one of differently colored light-emitting diodes and a Red, Green and Blue
and light-emitting diode disposed adjacent to said mixed hot and cold water outlet;

power circuitry for supplying a current;

10 a circuit board, said temperature sensor, said at least one of differently colored light-
emitting diodes and said Red, Green and Blue and light-emitting diode being functionally

connected to said power circuitry, said at least one of differently colored light-emitting diodes and said Red, Green and Blue and light-emitting diode being functionally connected to said printed circuit board;

15 a pressure switch functionally connected to a pressure sensor arranged in said mixing chamber for detecting the flow of water; and

 a control block connected to said power circuitry, said control block being operatively connected to said temperature sensor and to both said pressure switch and to said printed circuit board.

9. (New) A device in accordance with claim 8, wherein the colors of said light-emitting diodes or said Red, Green and Blue and light-emitting diode are arranged and switched in the necessary number and the selected colors on said printed circuit board such that a colored jet image, whose action is intended, is produced in the stream of fluid.

10. (New) A device in accordance with claim 8, wherein for mixing the water in a temperature-dependent, colored appearance, said light emitting diodes comprise a red-illuminating diode a yellow-illuminating diode and a blue-illuminating diode and said control block activates said light-emitting diodes such that colors are additively mixed for producing
5 a light in a desired color.

11. (New) A device in accordance with claim 8, further comprising an outlet end

device, said at least one of differently colored light-emitting diodes and said Red, Green and Blue and light-emitting diode being connected to said circuit board, said circuit board being positioned in said flow channel inwardly of said outlet end device.